AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently amended) A ball bearing, comprising:

a pair of bearing rings, concentrically disposed ~~inside and outside in a radial direction~~ such that a first bearing ring of said pair, having a first radius, and a second bearing ring of said pair, having a second radius, said second radius being greater than said first radius, are positioned such that said first bearing ring is radially inward of said second bearing ring;

an annular cage, positioned between said first and second bearing rings, said annular cage having a plurality of cylindrical through pockets ~~along said radial direction in several positions on~~ positioned around a circumference ~~and incorporated between both said bearing rings~~ thereof, each said through pocket being oriented in a radial direction through said circumference of said annular cage; and

a plurality of balls, corresponding in number to a number of said through pockets in said circumference of said annular cage, such that each ball is housed in ~~each said pocket in said annular cage~~ a corresponding one of said through pockets, wherein

said annular cage is guided by one of said bearing rings, and

~~a range representing an eccentricity tolerance in which said annular cage can rotate in an eccentric manner between both said bearing rings is included in a range representing a rattling tolerance in which said annular cage can move in a state in which said balls are fixed by setting~~ a relationship between a guide clearance α and a pocket clearance β ~~at $\alpha \leq \beta$ if~~ is such that $\alpha < \beta$, where said guide clearance of said annular cage with respect to ~~said~~ one said bearing ring is α, and said pocket clearance of a pocket inner wall face with respect to said ball is β, such that if said annular cage becomes off-centered with respect to said first and second bearing rings, an inside wall surface of each said pocket in said annular cage does not interfere with said corresponding ball in said pocket.

2. (Currently amended) The ball bearing according to claim 1, wherein:

~~a one of~~ said second bearing ~~rings~~ ring is an outer ring having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~, in an inner peripheral face, in an axial intermediate position; and

~~an other of~~ said first bearing ~~rings~~ ring is an inner ring having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~, in an outer peripheral face, in an axial intermediate position and having a counter bore with a diameter that gradually ~~reducing~~ tapers down axially from said race toward ~~axial~~ one end side.

3. (Currently amended) The ball bearing according to claim 1, wherein:

~~a~~ one of said bearing rings is an inner ring having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~ in an outer peripheral face, in an axial intermediate position; and

an other of said bearing rings is an outer ring having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~ in an inner peripheral face, in an axial intermediate position and having a counter bore with a diameter gradually axially increasing from said race groove toward ~~axial~~ one end side.

4. (Currently amended) The ball bearing according to claim 1, wherein:

said guide clearance α is a clearance in a state in which said annular cage is ~~put aside~~ displaced in said radial direction and brought into contact with said one bearing ring; and

said pocket clearance β is a clearance in a state in which said annular cage is ~~put aside~~ displaced in an axial direction and brought into contact with said balls.

5. (Currently amended) A ball bearing, comprising:

a pair of bearing rings, concentrically disposed ~~inside and outside in a radial direction~~ such that a first bearingring of said pair, having a first radius, and a second bearing ring of said pair, having a second radius, said second radius being greater

than said first radius, are positioned such that said first bearing ring is radially inward of said second bearing ring;

an annular cage, positioned between said first and second bearing rings, said annular cage having a plurality of cylindrical through pockets ~~along said radial direction in several positions on~~ positioned around a circumference ~~and incorporated between both said bearing rings~~ thereof, each said through pocket being oriented in a radial direction through said circumference of said annular cage; and

a plurality of balls, corresponding in number to a number of said through pockets in said circumference of said annular cage, such that each ball is housed in ~~each said pocket in said annular cage~~ a corresponding one of said through pockets, wherein

said annular cage is guided by one of said bearing rings; ~~and~~

~~a range representing an eccentricity tolerance in which said annular cage can rotate in an eccentric manner between both said bearing rings is included in a range representing a rattling tolerance in which said annular cage can move in a state in which said balls are fixed by setting~~ a relationship between a guide clearance α and a pocket clearance β ~~at $x+y < \alpha \leq \beta+x$~~ if is such that $x + y < \alpha < \beta + x$, where said guide clearance of said annular cage with respect to said one bearing ring is α, said pocket clearance of a pocket inner wall face with respect to said ball is β, an expansion amount of said annular cage in said radial direction due to rotational

centrifugal force is x, and an expansion amount of said annular cage in said radial direction due to thermal expansion is y; and

such that said inner wall surface of said pockets of said cage does not interfere with said balls, even if said cage becomes off-centered.

6. (Currently Amended) The ball bearing according to claim 5, wherein races having arcuate sectional shapes ~~corresponding to parts of an arc~~ are provided to said inner and outer bearing rings and said balls are in contact with said races in both said bearing rings at predetermined contact angles.

7. (Currently amended) A ball bearing, comprising:

a pair of bearing rings, concentrically disposed ~~inside and outside in a radial direction~~ such that a first bearing ring of said pair, having a first radius, and a second bearing ring of said pair, having a second radius, said second radius being greater than said first radius, are positioned such that said first bearing ring is radially inward of said second bearing ring;

an annular cage, positioned between said first and second bearing rings, said annular cage having a plurality of cylindrical through pockets ~~along said radial direction in several positions on~~ positioned around a circumference ~~and incorporated between both said bearing rings~~ thereof, each said through pocket being oriented in a radial direction through said circumference of said annular cage; and

a plurality of balls, corresponding in number to a number of said through pockets in said circumference of said annular cage, such that each ball is housed in ~~each said pocket in said annular cage~~ a corresponding one of said through pockets, wherein

said annular cage is guided by one of said bearing rings; ~~and~~

~~a range representing an eccentricity tolerance in which said annular cage can rotate in an eccentric manner between both said bearing rings is included in a range representing a rattling tolerance in which said annular cage can move in a state in which said balls are fixed by setting~~ a relationship between a guide clearance α and a pocket clearance β at $\cancel{\alpha_{max} \leq \beta_{min}+x \text{ and } \alpha_{min} > x+y}$ $\alpha_{max} < \beta_{min}+x$ and $\alpha_{min} > x+y$ if said guide clearance of said annular cage with respect to said one bearing ring is α, said pocket clearance of a pocket inner wall face with respect to said ball is β, an expansion amount of said annular cage in said radial direction due to rotational centrifugal force is x, an expansion amount of said annular cage in said radial direction due to thermal expansion is y, a maximum value of said guide clearance α is α_{max}, a minimum value of said guide clearance α is α_{min}, and a minimum value of said pocket clearance β is β_{min}; and

such that said inner wall surface of said pockets of said cage does not interfere with said balls, even if said cage becomes off-centered .

8. (Currently Amended) The ball bearing according to claim 4, wherein races having arcuate sectional shapes ~~corresponding to parts of an arc~~ are provided to said inner and outer bearing rings and said balls are in contact with said races in both said bearing rings at predetermined contact angles.

9. (Currently amended) A ball bearing, comprising:

an inner ring, having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~ on an outer peripheral face in an axial intermediate position and a counter bore with a diameter gradually reducing from said race toward axial one end side;

an outer ring disposed outside said inner ring and concentrically with said inner ring and having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~ on an inner peripheral face in an axial intermediate position;

an annular cage having cylindrical through pockets along said radial direction in several positions on a circumference and incorporated between said inner ring and said outer ring; and

a plurality of balls each housed in each said pocket in said annular cage and rolling in said respective races of said inner ring and said outer ring, wherein

said annular cage is guided by said outer ring; ~~and~~

a range representing an eccentricity tolerance in which said annular cage can rotate in an eccentric manner between said inner and outer rings is included in a

range representing a rattling tolerance in which said annular cage can move in a state in which said balls are fixed by setting a relationship between a guide clearance α and a pocket clearance β at ~~$\alpha \leq \beta$~~ $\alpha < \beta$ if said guide clearance of said annular cage with respect to said inner ring is α and said pocket clearance of a pocket inner wall face with respect to said ball is β; and

such that said inner wall surface of said pockets of said cage does not interfere with said balls, even if said cage becomes off-centered.

10. (Currently amended) A ball bearing, comprising:

an inner ring having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~ on an outer peripheral face in an axial intermediate position and a counter bore with a diameter gradually reducing from said race toward axial one end side;

an outer ring disposed outside said inner ring and concentrically with said inner ring and having a race with a sectional shape corresponding to a part of an arc on an inner peripheral face in an axial intermediate position;

an annular cage having cylindrical through pockets along said radial direction in several positions on a circumference and incorporated between said inner ring and said outer ring; ~~and~~

a plurality of balls each housed in each said pocket in said annular cage and rolling in said respective races of said inner ring and said outer ring, wherein

said annular cage is guided by said outer ring, and

a range representing an eccentricity tolerance in which said annular cage can rotate in an eccentric manner between said inner and outer rings is included in a range representing a rattling tolerance in which said annular cage can move in a state in which said balls are fixed by setting a relationship between a guide clearance α and a pocket clearance β at $\cancel{x+y < \alpha \leq \beta+x}$ $\underline{x+y < \alpha < \beta+x}$ if said guide clearance of said annular cage with respect to said inner ring is α, said pocket clearance of a pocket inner wall face with respect to said ball is β, an expansion amount of said annular cage in said radial direction due to rotational centrifugal force is x, and an expansion amount of said annular cage in said radial direction due to thermal expansion is y; and

such that said inner wall surface of said pockets of said cage does not interfere with said balls, even if said cage becomes off-centered.

11. (Currently amended) A ball bearing, comprising:

an outer ring having a race with ~~a~~ an arcuate sectional shape ~~corresponding to a part of an arc~~ on an inner peripheral face in an axial intermediate position and

a counter bore with a diameter gradually increasing from said race toward axial one end side;

an inner ring disposed inside said outer ring and concentrically with said outer ring and having a race with a sectional shape corresponding to a part of an arc on an outer peripheral face in an axial intermediate position;

an annular cage having cylindrical through pockets along said radial direction in several positions on a circumference and incorporated between said inner ring and said outer ring; ~~and~~

a plurality of balls each housed in each said pocket in said annular cage and rolling in said respective races of said inner ring and said outer ring, wherein

said annular cage is guided by said inner ring, and

a range representing an eccentricity tolerance in which said annular cage can rotate in an eccentric manner between said inner and outer rings is included in a range representing a rattling tolerance in which said annular cage can move in a state in which said balls are fixed by setting a relationship between a guide clearance α and a pocket clearance β at $\cancel{\alpha \leq \beta}$ $\underline{\alpha < \beta}$ if said guide clearance of said annular cage with respect to said inner ring is α and said pocket clearance of a pocket inner wall face with respect to said ball is β; and

such that said inner wall surface of said pockets of said cage does not interfere with said balls, even if said cage becomes off-centered.

12. (Currently Amended) The ball bearing according to claim 11, wherein said eccentricity tolerance of said annular cage is included in said rattling tolerance of said annular cage by setting said relationship between said guide clearance α and said pocket clearance β at ~~$x+y < \alpha \leq \beta+x$~~ $\underline{x+y < \alpha < \beta+x}$ if an expansion amount of said annular cage in said radial direction due to rotational centrifugal force is x and an expansion amount of said annular cage in said radial direction due to thermal expansion is y.